ABSTRACT

As the times develop, the demand for advanced technology continues to grow, not only in daily life but also in the military domain. In this context, devices capable of providing precise weather information have become increasingly indispensable, particularly in bolstering the success of military operations, including the responsibilities undertaken by snipers.[1] This research addresses a portable weather station capable of measuring and recording five critical weather parameters: wind speed, wind direction, air pressure, temperature, and humidity. For its development, state-of-the-art sensor technology and specially designed hardware were employed to ensure exceptional accuracy. The methodology encompassed hardware design, sensor calibration, and extensive testing to ensure the reliability and precision of the generated weather data. Field testing results affirm that this portable weather station adeptly provides accurate weather data in various environmental and weather conditions, empowering snipers to make more informed decisions in executing their duties. Furthermore, this weather station has been meticulously crafted with considerations for portability and robust endurance for extended operations. Consequently, this device seamlessly integrates into military equipment and significantly augments the effectiveness of military actions

Keywords: Portable Weather Station, Snipers, Military, Wind Direction and Speed